

SOME REMARKS ON THE GENERA *DAMAYANTIA*, ISSEL,
COLLINGEA, SIMR., AND *ISSELENTIA*, COLLGE.

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IN a recent issue of the "Proceedings" of this Society,¹ Lieut.-Col. Godwin-Austen criticises some work of mine upon the Bornean Slug fauna. I should not have troubled to notice this article under ordinary circumstances, for the facts are so clear and the material before me so convincing, but I had previously promised the writer to do so, and further if I were to treat it with silence, malacologists and others unacquainted with these little known genera of land molluses might possibly think there was some foundation for Lieut.-Col. Godwin-Austen's statements.

Very briefly I must first sketch the history of the material under discussion.

In October, 1893, Mr. Edgar A. Smith sent me for identification a small collection of slug-like molluses, received by the British Museum from the late Mr. A. H. Everett, and collected by him in Sarawak, N.W. Borneo. These were described by Lieut.-Col. Godwin-Austen and myself in 1895 (2), and named *Damayantia Smithi*, *Microparmarion Pollonerai*, and *M. Simrothi*. In this paper the drawings and descriptions of the generative organs were made by the present writer from his own dissections, together with the "Summary and Conclusion," but the bulk of the drawings were made by the co-author, as also the remarks on "Affinities."

In 1898 Professor Simroth published a valuable paper on some species of *Parmarion*, etc., from China, Java, etc. (4), in which he constituted a new genus (*Collingea*) for a Javan slug previously known as *Microparmarion Strubelli*, and he pointed out that what Lieut.-Col. Godwin-Austen and I had termed *Microparmarion Pollonerai* and *M. Simrothi* must also be referred to the genus *Collingea*, for in all three members of the genus there is a very striking anatomical character, viz., a protrusion of the distal portion of the penis-tube, handle-like, out of its sheath, a feature which, doubtless owing to our then insufficient acquaintance with and knowledge of these *Parmarion*-like slugs, we failed to realise the importance of.

In 1900 I received from the Sarawak Museum a collection of slugs from N.W. Borneo, and in working at these I had occasion to re-examine the previous Bornean material in the British Museum. I should perhaps mention that between 1893 and 1900 I had

¹ Vol. v, p. 311.

examined numerous specimens of *Girasia*, *Austenia*, *Parmarion*, *Microparmarion*, *Damayantia*, and allied genera from India, Ceylon, Borneo, Lombok, Annam, Tonkin, China, the Philippines, etc.

In this second examination I soon discovered that a serious error had been made, for of the three specimens in the bottle labelled *Damayantia Smithi*, I found that the one which Lieut.-Col. Godwin-Austen had figured was different from the one I had dissected. It was at once evident that the former was not referable to Issel's genus *Damayantia*, for in this second Bornean collection I had numerous beautiful examples of *D. dilecta*, Issel, the type of the genus, and of a new species, *D. carinata*, Cllge. Further, on examining the anatomy of the specimen figured by Lieut.-Col. Godwin-Austen, I found the handle-like protrusion of the penis, and therefore I transferred this species to the genus *Collingea*, Simr. The remaining two specimens proved to belong to a new genus I was investigating (*Isselentia*), and these I described under the name of *I. globosa*.

This error I pointed out in the paper in which the second Bornean collection was described (1).

In August, 1902, Lieut.-Col. Godwin-Austen wrote me at considerable length, informing me that he was intending to publish his views upon these molluscs, which correspondence continued until the end of September. This correspondence is of interest, in that it throws much light upon the views he then held upon the affinities, etc., of the Indo-Malayan slugs and slug-like molluscs, but which have since undergone still further change.

Turning now to the criticism, it will perhaps be best if I treat of the species and genera in the same order as Lieut.-Col. Godwin-Austen.

1. *DAMAYANTIA CARINATA*, Cllge.

Lieut.-Col. Godwin-Austen has seen a specimen of this mollusc, and admits that it is "the first Bornean slug-like mollusc . . . in which the external form and proportion of the parts to one another correspond closely with Issel's figure of *Damayantia dilecta*," but he is wrong in stating that I observed a "jagged or toothed appearance of the keeled foot." The foot is not keeled, and what I described was a jagged or toothed appearance on the keel of the dorsum. As this is constant in all the specimens, and the most careful examination fails to show that it is other than normal, I do not share Lieut.-Col. Godwin-Austen's view that it is due to "epidermal destruction." The shell is rightly described as being internal, yet so recently as September 10th, 1902, Lieut.-Col. Godwin-Austen emphatically denied this, stating that it only appeared so owing to the expansion [!] of the shell-lobes. This is extremely interesting, as showing his conception of the genus at that date.

It is a matter of little moment whether or not this species is distinct from *D. dilecta*, Issel. I have examined about thirty specimens of this last-mentioned species from Borneo, and I am of opinion that *D. carinata* is specifically distinct from it; on the other hand, Lieut.-Col. Godwin-Austen, who has never seen a member of this genus until he examined this specimen of *D. carinata*, thinks it is not.

2. *COLLINGEA SMITHI*, Cllge. & Godw.-Aust. (= *Damayantia Smithi*, Cllge. & Godw.-Aust.).

When in 1900 I re-examined this species, I found that the specimen which Lieut.-Col. Godwin-Austen had figured (2, pl. xi, figs. 1-5) was not the one I had dissected. My dissection was of a species of *Isselentia* (which I have since named *globosa*), while the specimen described and figured by Lieut.-Col. Godwin-Austen turns out on re-examination to be a member of the genus *Collingea*, Simr. With Mr. Edgar A. Smith's kind permission, I made a careful examination of the generative organs, and found the peculiar handle-like protrusion of the penis, thus leaving no doubt whatever as to the generic position of this mollusc. Personally, I must admit that had I at the time seen Issel's figures of *Damayantia* (3), I should most certainly never have dreamt of placing this slug in this latter genus, and I think my co-author would have acted more wisely had he, even at this late date, admitted so palpable an error. But apart from the internal structure, the merest tyro in malacology would not hesitate to at once distinguish any species of *Damayantia* from the mollusc under discussion, in which the shell is exposed, and all the external features point to a relationship with the genus *Parmarion* of Fischer.

3. *ISSELENTIA*, Cllge.

Respecting the remaining two specimens in the bottle containing *Collingea Smithi*, they are members of the genus *Isselentia*, and of course, the figure given by me in the Transactions of the Royal Society of Edinburgh (1, pl. iii, fig. 50) agrees pretty closely with that I had previously given in the Proceedings of the Zoological Society (2, pl. xi, fig. 9) of the same specimen, then regarding it as a *Damayantia*. The "wonderful similarity" noted by Lieut.-Col. Godwin-Austen is thus easily explained.

As to the views that the wavy crinkled edge of the keel of the dorsum (not the foot) and that the plications of the mantle-lobes are due to the action of alcohol, or a *post mortem* state due to contraction, "which in all probability would not be seen in the living animal, or in one killed in water and then put into spirit," one can scarcely believe that the author is serious. I have examined upwards of two dozen specimens of *I. plicata*, Cllge., all of which I believe were killed in water. They were in a beautiful state of preservation, and in every case exactly like the original figures (1, pl. i, figs. 13-15). As to the validity of the genus, I have already described and figured it in some detail, and if Lieut.-Col. Godwin-Austen is unable to distinguish it from *Damayantia*, Issel, on the one hand, and *Collingea*, Simr., on the other, I fear no further figures or description can be of any use to him.

There are two other points which I must deal with, but being of a personal nature I am loth to touch upon them except in the very briefest manner.

When I had dissected the specimens described in the P.Z.S. (2), I made drawings of them, and together with the specimens forwarded them to my co-author; they were ultimately returned to me, and

my drawings were published. Figures very similar to these were published later by Lieut.-Col. Godwin-Austen, in pt. 8, vol. ii, of the "Mollusca of India," with these remarks: "I illustrate the anatomy of *Microparmarion* with my original drawings (those in the P.Z.S., 1895, being copies of them)." I have elsewhere (*I*, p. 304) pointed out the incorrectness of this statement, and on September 21st, 1902, Lieut.-Col. Godwin-Austen himself wrote to me acknowledging that the P.Z.S. drawings were the original ones, and made by me from my dissections. I therefore not unnaturally feel aggrieved to find in these "Proceedings," vol. v, p. 312, that he again states, in a footnote, that the figures in the "Mollusca of India" are his original drawings, while those in the P.Z.S., pls. xi-xiv, were copied from them. In justice to myself, I must again correct this misstatement of fact.

The second point is the charge of misplacing the specimens in the bottles at the British Museum. When I re-examined the material which formed the subject of the above-mentioned conjoint paper, I found it exactly as Lieut.-Col. Godwin-Austen returned it to me, and in which condition it left my hands in February, 1894, viz. in perfect order, and in such condition I left it. It has since been examined by Lieut.-Col. Godwin-Austen, and if he left it as he found it the material is still in perfect order.

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3. *Issel* (*A.*).—"Molluschi Borneensi": Ann. Museo Civico Genova, 1874, vol. vi, pp. 366-486, pls. iv-vii.
4. *Simroth* (*Heinrich*).—"Ueber die Gattungen *Parmacochlea*, *Parmarion*, und *Microparmarion*": Zool. Jahrb., 1898, Bd. xi (Abth. f. Syst.), pp. 151-172, T. 15.